

6"X ½"₧ SEE TABLE FOR LENGTH ``L''(TYP.)

SECTION A-A

STRUCTURAL STEEL NOTES

ALL INTERMEDIATE DIAPHRAGM STEEL AND CONNECTOR PLATES SHALL BE AASHTO M270 GRADE 50 OR APPROVED EQUAL.

TENSION ON THE ASTM A325 BOLTS THROUGH THE ANGLE MEMBER SHALL BE CALIBRATED USING DIRECT TENSION INDICATOR WASHERS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

TENSION ON THE ASTM A449 BOLTS THROUGH THE GIRDER WEB SHALL BE SNUG TIGHTENED FOLLOWED BY AN ADDITIONAL $\frac{1}{4}$ TURN.

THE PLATES, BENT PLATES, AND ANGLES SHALL BE GALVANIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

GALVANIZE THE HIGH STRENGTH BOLTS, NUTS, WASHERS AND DIRECT TENSION INDICATORS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

USE AN ASTM F436 HARDENED WASHER WITH STANDARD AND SLOTTED HOLES UNDER EACH BOLT HEAD AND NUT.

FOR BOLTS THROUGH THE GIRDER WEB, PROVIDE SUFFICIENT LENGTH OF THREADS ON ALL BOLTS TO ACCOMMODATE WASHERS AND THE THICKNESS OF CONNECTING MEMBER PLUS AT LEAST $\frac{1}{4}$ " PROJECTION BEYOND THE NUT.

INTERMEDIATE DIAPHRAGM ASSEMBLY SHALL COMPLY WITH SECTION 1072 OF THE STANDARD SPECIFICATIONS.

SUBMIT TWO SETS OF WORKING DRAWINGS FOR THE INTERMEDIATE DIAPHRAGM ASSEMBLY FOR REVIEW, COMMENTS AND ACCEPTANCE.
AFTER REVIEW, COMMENTS, AND ACCEPTANCE, SUBMIT SEVEN SETS FOR DISTRIBUTION.

IN THE EXTERIOR BAYS, PLACE TEMPORARY STRUTS BETWEEN PRESTRESSED GIRDERS ADJACENT TO THE STEEL DIAPHRAGMS. STRUTS SHALL REMAIN IN PLACE 3 DAYS AFTER CONCRETE IS PLACED.

THE COST OF THE STEEL DIAPHRAGMS AND ASSEMBLIES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PRESTRESSED CONCRETE GIRDERS.

TABLE

GIRDER TYPE	DIM "A"	DIM "B"	DIM "C"	DIM "L"
63" BULB TEE	1′-5′′	1'-43/4''	1'-4''	3′-5′′

L 8 X 6 X 1/2 OR 8"X6" X 1/2" BENT P SEE TABLE FOR LENGTH "L" (TYP.) FOR BOLT CONNECTION TSEE TYPICAL BOLT WITH DTI ASSEMBLY DETAIL $\frac{7}{8}$ " Ø H.S. BOLT, $\overline{}$ 2 HARDENED WASHERS AND

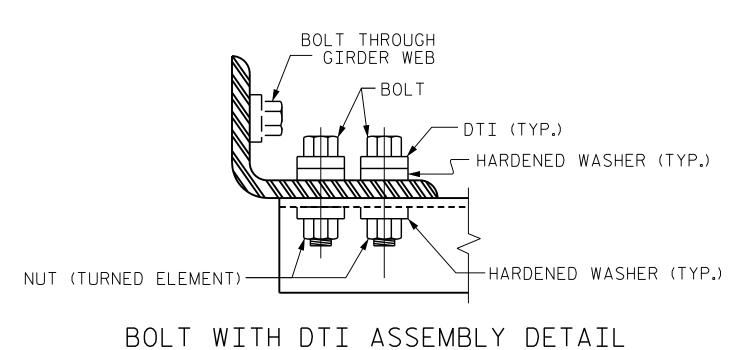
SECTION B-B

CONNECTION DETAILS

DTI (TYP.)

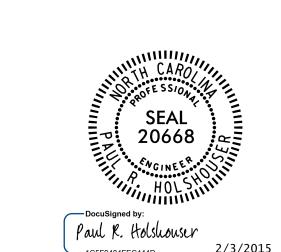
– L 3 X 3 X $\frac{5}{16}$

(FOR SKEW = 90°)



PROJECT NO. R-2514B ONSLOW/JONES COUNTY STATION: 173+54.46 -L-

SHEET 8 OF 8



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH STANDARD INTERMEDIATE STEEL DIAPHRAGMS FOR 63" MODIFIED BULB TEE PRESTRESSED CONCRETE GIRDERS (LEFT LANE)

2/3/2015 REVISIONS The LOUIS BERGER GROUP, Inc DATE: BY: BY:

1001 Wade Avenue, Suite 400 Raleigh, NC 27605-3322 NC COA No. F-0840

DATE : 07/14 ASSEMBLED BY: M. HOGAN CHECKED BY: R. COFFMAN DATE: 07/14 DESIGN ENGINEER OF RECORD : P.HOLSHOUSER DATE : 10/14 DRAWN BY: RWW II/09 CHECKED BY : GM II/09 REV. IO/I/II MAA/GM

4\R-2514B_SD_ _str +h'

STD. NO. PCG11 STR. #4

DATE:

SHEET NO

S4-34

TOTAL SHEETS